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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,305	10/03/2003	Sang Chul Yoon	P24382	9467

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GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

RAHIM, AZIM

ART UNIT	PAPER NUMBER
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3744

NOTIFICATION DATE	DELIVERY MODE
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09/28/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No.	Applicant(s)	
	10/677,305	YOON ET AL.	
	Examiner	Art Unit	
	Azim Rahim	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-22 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22 and 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 16, 19-20, 27 and 30 are rejected under 35 U.S.C. 103(a) as being anticipated by Brown, Jr. et al. (US 5,761,083) in view of Li et al. (US 2002/0076939), Naotaka (JP 2002-183258) and Soh (US 2002/0115435).

Brown, Jr. et al. explicitly teach the method and apparatus of a central control system for controlling air conditioners (10), comprising a plurality of air conditioners (col. 3, lines 38-53), a central controller (18) that receives a control command to control the air conditioners (col. 3, lines 38-44), that monitors the operating states of the controlled air conditioners (col. 4, lines 38-42), that automatically schedules control signals so that

time intervals between operation of the air conditioners can be adjusted to manage electric power consumption and that outputs the scheduled control signals to the air conditioners (col. 4, lines 25-53), an internet protocol sharer connected to the central controller that performs an integrated management operation for the internet protocol addresses assigned to the air conditioners (col. 4, lines 25-34), a control command and control program, a module transmitting control command "to the air conditioners, managing a time schedule to adjust the air conditioners and globally controlling the modules (Figure 2), and the control program being executed so that a timetable in which the operation schedule for the air conditioners corresponding to a specified period can be displayed on the monitor (col. 5, lines 14-20).

Brown, Jr. et al. fail to explicitly teach a touch screen-based monitor configured to input the control command through a screen touch operation, the control program being executed so that a timetable in which the operation schedule for the air conditioners corresponding to a specified period can be displayed on the monitor, the timetable can be input and edited from the monitor, the timetable having a number of cells, the control program converting colors of selected cells so that the cells selected to input the operation schedule for the air conditioners can be distinguished from non-selected cells, the selected cells distinguished by the colors can be displayed, and the control program being further configured to receive the operation schedule of the designated air conditioners by dragging and selecting the cells on the monitor.

Li et al. explicitly teach a control system having a touch screen-based monitor (paragraph 0033) configured to input the control command through a screen touch

operation (paragraph 0033), and the control program converting colors of selected cells so that the cells selected to input the operation schedule for the air conditioners can be distinguished from non-selected cells, and the selected cells distinguished by the colors can be displayed (paragraph 0033).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the air conditioning control system of Brown, Jr. et al. with the control characteristics of Li et al. because these features provide an advantageously user- friendly interface, thus increasing efficiency of use by a user. Also note that most personal computers utilized color changing of cells and or windows on spreadsheets. Naotaka teaches the timetable can be input and edited from the monitor (see solution, user input, via a computer)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the central control system of Brown, Jr. et al. to include the timetable as taught by Naotaka in order for a user to easily edit cells in a timetable for viewing by other users.

Soh explicitly teaches a touch screen based control system featuring the ability to drag cells on a monitor (paragraph 0032).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the air conditioning control system of Brown, Jr. et al. and Li et al. with the control features of Soh since drag and drop features advantageously provide a user-friendly interface, thus increasing efficiency of use by a user.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. (US 5,761,083) in view of Li et al. (US 2002/0076939) in further view of Kikuchi et al. (US 2003/0070438).

Brown, Jr. et al. and Li et al. explicitly teach the elements of the present invention as described above, but fail to teach the air conditioners connected on an internal network and assigned to different IP addresses. Kikuchi et al. explicitly teach air conditioners connected on an internal network (paragraph 0008, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the air conditioner control system as taught by Brown, Jr. et al. and Li et al. with the internal network as taught by Kikuchi et al. since utilizing an internal network increases advantageously increases efficiency and speed of controlling a system.

Regarding the use of separate IP addresses, one of ordinary skill in the computer art would have known to use separate IP addresses to efficiently isolate and distinguish one air conditioner from another.

9. Claims 21-22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. (US 5,761,083) in view of Li et al. (US 2002/0076939) in further view of Kline et al. (US 6,241,156).

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Brown, Jr. et al. and Li et al. explicitly teach the elements of the present invention as described above, but fail to teach a client manager providing a web page to remotely control the air conditioners, and a database storing data. Kline et al. explicitly teach a client manager providing a web page to remotely control air conditioners (col. 3, lines 1-20) and a database storing data (col. 9, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the air conditioner control System as taught by Brown, Jr. et al. and Li et al. with the web page control as taught by Kline et al. since the internet provides a user friendly, aesthetically pleasing means of remote control.

Response to Arguments

3. Regarding the rejection of claim 30 under 35 U.S.C. 112 second paragraph as being indefinite, examiner has withdrawn this rejection as necessitated by amendment.

4. Regarding the proposed rejection of previously presented claim 24, as this claim has not been addressed, examiner as addressed the limitations of this claim in amended claim 16. Detailed consideration is described above.

5. Applicant's arguments filed 6/22/2007 have been fully considered but they are not persuasive.

6. Applicant argues that Li et al. clearly does not disclose a control program converting colors of selected cells so that the cells selected to input the operation schedule from the air conditioner can be distinguished from non-selected cells and the selected dells, distinguished by the colors, can be displayed. In response to applicant's

argument, Examiner asserts that Li et al. does disclose these features as claimed. As taught in [0033] lines 9-13, "To select a particular screen or function, the operator touches an area of the display screen and pushes a button on the pen. The touched area confirms being selected by the light pen by changing its color or displaying a menu for example." This reads on the argued claim limitation based on the fact that when a cell on a table or a window is selected on a computer, the color changes, which is well known in the art. The basis of this limitation is to distinguish the selected cells from the non-selected cells, which is performed by the pen. In addition, most computers at the time the invention was made had this type of color changing of selected cells. Therefore the argument stands as rejected.

7. Applicant also argues that the Examiner has given absolutely no reason why one should take a touch screen out of the gallium arsenide wafer processing method and use the same in an air conditioner control system as recited in Applicants' claim. Applicant further argues that the mere fact that the Examiner asserts, without any supporting evidence, that such would increase efficiency does not overcome the fact that the two references cited by the Examiner are from totally nonanalogous art areas, the Examiner has not set forth any logical reason why one would select the isolated touch screen feature of the totally nonanalogous art of LI et al. and use the same in the BROWN, JR. et al. energy management system. Also, applicant argues that the Examiner's asserted rationale of "increasing efficiency" can be asserted to justify any proposed combination and there is no disclosure in either of the references proposed to be combined by the Examiner that they lack efficiency and are in any need of an

increase in efficiency. In response to applicant's argument, Examiner asserts that the motivation of "increased efficiency" is due to the use of the touch screen monitor by a user. A user can more efficiently use a touch screen device by knowing what cells are selected and which cells are not selected. Also, in response to Applicant's argument that a touch screen of a gallium arsenide wafer processing method is nonanalogous art, it has been held that the determination that a reference is from nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. *In re Wood*, 202 USPQ 171,147. In this case, the touch screen is used as prior art against the invention, not the wafer processing method. Therefore, the argument stands as rejected.

Conclusion

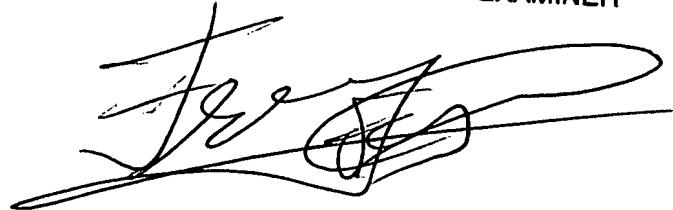
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azim Rahim whose telephone number is 571-270-1998. The examiner can normally be reached on Mon - Thur 8am - 4:30pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached at 571-272-6681 or Cheryl Tyler at 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR 9/13/2007

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over a horizontal line. The signature is stylized with a large, looped 'F' and a circular flourish at the end.